```
------------------------------------------------------------------------
1       SUBROUTINE SUB(A,N)
2       INTEGER N
3       REAL A(ABS(N))
4       WRITE(*,*) A
5       END SUBROUTINE
------------------------------------------------------------------------
```

# FIG. 1A

**PRIOR ART**

```
------------------------------------------------------------------------
1       SUBROUTINE SUB(A,N)
2       INTEGER N
        IF (N.GE.0) THEN           ! EXPANSION CODE
          TMP = N                  ! EXPANSION CODE
        ELSE                       ! EXPANSION CODE
          TMP = -N                 ! EXPANSION CODE
        END IF                     ! EXPANSION CODE
3       REAL A(TMP)
4       WRITE(*,*) A
5       END SUBROUTINE
------------------------------------------------------------------------
```

# FIG. 1B

**PRIOR ART**

```
1      char *copy_string(char *s)
2      {
3        int i;
4        char *buffer = (char*)malloc(strlen(s) + 1);
5
6        for (i = 0; s[i] != '\0'; ++i)
7          buffer[i] = s[i];
8
9        return buffer;
10     }
```

## FIG. 2A

**PRIOR ART**

```
1      char *copy_string(char *s)
2      {
3        int i;
 char *p; /* EXPANSION CODE */
 int tmp; /* EXPANSION CODE */
 tmp = 0; /* EXPANSION CODE */
 for (p = s; *p != '\0'; ++p) /* EXPANSION CODE */
   ++tmp; /* EXPANSION CODE */
4        char *buffer = (char*)malloc(tmp + 1);
5
6        for (i = 0; s[i] != '\0'; ++i)
7          buffer[i] = s[i];
8
9        return buffer;
10     }
```

## FIG. 2B

**PRIOR ART**

```
-----------------------------------------------------------------
1       IF (Z.GT.EPS) THEN
2          A=B1
3       ELSE IF(ABS(Z).LE.EPS) THEN
4          A=B2
5       ELSE
6          A=B3
7       END IF
-----------------------------------------------------------------
```

# FIG. 3A
## PRIOR ART

```
-----------------------------------------------------------------
1       IF (Z.GT.EPS) THEN
2          A=B1
3a      ELSE
           IF (Z.GE.0.0) THEN        ! EXPANSION CODE
             TMP = Z                 ! EXPANSION CODE
           ELSE                      ! EXPANSION CODE
             TMP = -Z                ! EXPANSION CODE
           END IF                    ! EXPANSION CODE
3b         IF(TMP.LE.EPS) THEN
4             A=B2
5          ELSE
6             A=B3
3c         END IF
7       END IF
-----------------------------------------------------------------
```

# FIG. 3B
## PRIOR ART